Redefining Creativity in the Era of AI? Perspectives of Computer Scientists and New Media Artists

Abstract

ABSTRACT Artificial intelligence (AI) has breached creativity research. The advancements of creative AI systems dispute the common definitions of creativity that have traditionally focused on five elements: actor, process, outcome, domain, and space. Moreover, creative workers, such as scientists and artists, increasingly use AI in their creative processes, and the concept of co-creativity has emerged to describe blended human–AI creativity. These issues evoke the question of whether creativity requires redefinition in the era of AI. Currently, co-creativity is mostly studied within the framework of computer science in pre-organized laboratory settings. This study contributes from a human scientific perspective with 52 interviews of Finland-based computer scientists and new media artists who use AI in their work. The results suggest scientists and artists use similar elements to define creativity. However, the role of AI differs between the scientific and artistic creative processes. Scientists need AI to produce accurate and trustworthy outcomes, whereas artists use AI to explore and play. Unlike the scientists, some artists also considered their work with AI co-creative. We suggest that co-creativity can explain the contemporary creative processes in the era of AI and should be the focal point of future creativity research.